

## AMENDMENTS

### In the Claims:

Claims 51-76 were previously canceled.

Please cancel claims 85-87, 92-93, and 99-100 without prejudice.

Please amend claims 77, 88, 94, 98, and 101 as shown herein.

Claims 77-84, 88-91, 94-98, and 101 are pending and are listed following:

#### **1-76. (canceled)**

**77. (currently amended)** One or more computer readable media comprising computer executable instructions that, when executed, direct a network system having a content provider which provides content over a network through local service providers to multiple content rendering units, the network system being directed to:

identify a peak time when a plurality of the content rendering units are likely to request the content supplied by the content provider;

send at least some of the content from the content provider to ~~the~~ a local service provider prior to the peak time; and

store the content received from the content provider at the local service provider for use during the peak time;

estimate a time-to-live tag for the content received from the content provider at the local service provider to indicate when the content is expected to be updated; and

derive the time-to-live tag based upon a time since the content was last updated.

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2       **78. (previously presented)** One or more computer readable media as  
3 recited in claim 77, further comprising computer executable instructions that, when  
4 executed, direct the network system to send at least some of the content from the  
5 content provider to the local service provider prior to the peak time without being  
6 requested by the content rendering units.

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8       **79. (previously presented)** One or more computer readable media as  
9 recited in claim 77, further comprising computer executable instructions that, when  
10 executed, direct the network system to send streaming audio or video data from the  
11 content provider to the local service provider prior to the peak time.

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13       **80. (previously presented)** One or more computer readable media as  
14 recited in claim 77, further comprising computer executable instructions that, when  
15 executed, direct the network system to request the content at a local service  
16 provider based on results of identifying the peak time.

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18       **81. (previously presented)** One or more computer readable media as  
19 recited in claim 77, further comprising computer executable instructions that, when  
20 executed, direct the network system to monitor usage patterns of the content and  
21 schedule early sending of the content at a time prior to the peak time based on the  
22 usage patterns.

1           **82. (previously presented)** One or more computer readable media as  
2 recited in claim 77, further comprising computer executable instructions that, when  
3 executed, direct the network system to serve the content from the local service  
4 providers to requesting content rendering units during the peak time.

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6           **83. (previously presented)** One or more computer readable media as  
7 recited in claim 77, further comprising computer executable instructions that, when  
8 executed, direct the network system to designate the peak time in terms of discrete  
9 time slots as covering an ending portion of at least one time slot and a beginning  
10 portion of at least one subsequent time slot, and send the content that is likely to be  
11 requested in the subsequent time slot prior to the peak time.

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13           **84. (previously presented)** One or more computer readable media as  
14 recited in claim 77, further comprising computer executable instructions that, when  
15 executed, direct the network system to customize a set of prioritized content  
16 according to requests made by the content rendering units, and selectively send the  
17 set of prioritized content to the local service provider prior to the peak time.

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19           **85-87. (canceled)**  
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1           **88. (currently amended)**     One or more computer readable media  
2 comprising computer executable instructions that, when executed, direct a local  
3 service provider in a network system having a content provider which provides  
4 content over a network through the local service provider to multiple content  
5 rendering units, the local service provider being directed to:

6           monitor usage patterns to detect highly requested content;

7           identify from the usage patterns a peak time when a plurality of the content  
8 rendering units are likely to request the content;

9           schedule delivery of the highly requested content at a scheduled time prior  
10 to the peak time;

11          receive the highly requested content from the content provider at the  
12 scheduled time prior to the peak time; and

13          store the highly requested content received from the content provider for  
14 use during the peak time;

15          estimate a time-to-live tag for the highly requested content received from  
16 the content provider to indicate when the highly requested content is expected to  
17 be updated; and

18          derive the time-to-live tag based upon a time since the highly requested  
19 content was last updated.

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21           **89. (previously presented)**     One or more computer readable media as  
22 recited in claim 88, further comprising computer executable instructions that, when  
23 executed, direct the local service provider to monitor the usage patterns to detect  
24 highly requested streaming audio or video data.  
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1           **90. (previously presented)**   One or more computer readable media as  
2 recited in claim 88, further comprising computer executable instructions that, when  
3 executed, direct the local service provider to modify target specifications, which  
4 are used by the local service provider to reference the content stored at the content  
5 provider, to instead reference the content stored at the local service provider.

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7           **91. (previously presented)**   One or more computer readable media as  
8 recited in claim 88, further comprising computer executable instructions that, when  
9 executed, direct the local service provider to serve the stored content to requesting  
10 content rendering units during the peak time.

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12           **92-93. (canceled)**

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14           **94. (currently amended)**   One or more computer readable media  
15 comprising computer executable instructions that, when executed, direct a network  
16 system having a content provider which provides content through a local service  
17 provider to multiple content rendering units, the content being provided from the  
18 content provider to the local service provider over a first network, the network  
19 system being directed to:

20           distribute supplemental content from the content provider to the local  
21 service provider over a second network;

22           choose selected portions of the supplemental content to be stored at the  
23 local service provider based upon usage patterns exhibited by the content rendering  
24 units; and  
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1 store the selected portions of the supplemental content received from the  
2 content provider in a cache at the local service provider for use in serving the  
3 content rendering units;

4 estimate a time-to-live tag for the supplemental content received from the  
5 content provider at the local service provider to indicate when the supplemental  
6 content is expected to be updated; and

7 derive the time-to-live tag based upon a time since the supplemental content  
8 was last updated.

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10 **95. (previously presented)** One or more computer readable media as  
11 recited in claim 94, further comprising computer executable instructions that, when  
12 executed, direct the network system to distribute the supplemental content as  
13 streaming audio or video data from the content providers to the local service  
14 provider over the second network.

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16 **96. (previously presented)** One or more computer readable media as  
17 recited in claim 94, further comprising computer executable instructions that, when  
18 executed, direct the network system to broadcast the supplemental content via the  
19 second network which is a satellite network.

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21 **97. (previously presented)** One or more computer readable media as  
22 recited in claim 94, further comprising computer executable instructions that, when  
23 executed, direct the network system to serve the distributed content from the local  
24 service provider to requesting content rendering units.  
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1           **98. (currently amended)**       One or more computer readable media  
2 comprising computer executable instructions that, when executed, direct a network  
3 system having a content provider which provides content through a local service  
4 provider to multiple content rendering units, the content being provided from the  
5 content provider to the local service provider over a first network, the network  
6 system being directed to:

7           identify a peak time when a plurality of the content rendering units are  
8 likely to request the content stored at the content provider;

9           distribute supplemental content from the content provider to the local  
10 service provider over a second network prior to the peak time; and

11          store selected portions of the supplemental content received from the  
12 content provider in a cache at the local service provider for use in serving the  
13 content rendering units.

14          estimate a time-to-live tag for the supplemental content received from the  
15 content provider at the local service provider to indicate when the supplemental  
16 content is expected to be updated; and

17          derive the time-to-live tag based upon a time since the supplemental content  
18 was last updated.

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20       **99-100. (canceled)**  
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1           **101. (currently amended)**       One or more computer readable media as  
2 ~~recited in claim 100, further~~ comprising computer executable instructions that,  
3 when executed, direct a network system having a content provider which provides  
4 content through a local service provider to multiple content rendering units, the  
5 content being provided from the content provider to the local service provider over  
6 a first network, the network system being directed to:

7                 distribute supplemental content from the content provider to the local  
8 service provider over a second network;

9                 store selected portions of the supplemental content received from the  
10 content provider in a cache at the local service provider for use in serving the  
11 content rendering units;

12                 estimate a time-to-live tag for the supplemental content received from the  
13 content provider at the local service provider to indicate when the supplemental  
14 content is expected to be updated; and

15                 derive the time-to-live tag based upon a time since the supplemental content  
16 was last updated.